

Notice of Allowability

Application No.

09/887,524

Applicant(s)

SIMON ET AL.

Examiner

Cam Y T. Truong

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/7/2006.
2. ☒ The allowed claim(s) is/are 1,5-9,11-19,21,24,26-32,42 and 47-50.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Cam Y Truong
Primary Examiner
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DETAILED ACTION

1. Claims 1-21, 24-33, 42, 46-51 and 54-58 are pending in this Office Action.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kasey C. Christie on 7/17/2006.

In the claims:

Please replace claims 1, 12, 15 -19, 21, 26-29, 32-33, 42, 47, 48, 50 with amended claims 1, 12, 15 -19, 21, 26-29, 32-33, 42, 47, 48, 50.

Please cancel claims 2-4, 10, 20, 25, 46, 51 and 54-58.

In the specification:

Please replace, in page 29, the paragraph starts from line 7-11 with the amended paragraph as:

An implementation of an exemplary filter generator may be stored on or transmitted across some form of computer readable media. Computer readable media can be any available media that can be accessed by a computer. By way of example, and not limitation, computer readable media comprises computer

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storage media.

Please replace, in page 30, the paragraph starts from lines 1-6 with the amended paragraph as:

The term "modulated data signal" means a signal that has one or more of its characteristics set or changed in such a manner as to encode information in the signal. By way of example, and not limitation, communication media includes wired media such as a wired network or direct-wired connection, and wireless media such as acoustic, RF, infrared, and other wireless media.

1. (Currently Amended) A method for automatic production of one or more sets of instructions for an input filter of a computer system, the method comprising:
 - obtaining input-description-data, which define properties of valid input directly provided by a computing component without human intervention;
 - transforming the input-description-data into a data structure, wherein the data structure is an organized representation of the input-description-data and the data structure is embodied on a computer-readable storage media;
 - from the organized representation of the input-description-data of the data structure, automatically generating a set of instructions for filtering input directly provided by the computing component without human intervention based upon the properties of valid input defined by the input-description-data, wherein the properties of valid input indicate parameters of input by defining boundary delimitations of parameters and define assumptions regarding parameters, the generating further comprises:
 - parsing the data structure to extract the input-description-data organized in the data structure;
 - synthesizing the set of instructions based upon the input-description-data extracted by the parsing, the synthesizing comprising translating the organized representation of the input-description-data of the data structure into the set of instructions.

12. (Currently amended) A computer system comprising:

- a memory comprising one or more program modules comprised of computer-executable instructions; and
- a processor coupled to the memory, the processor being configured to execute the one or more program modules, which comprise:
 - an application program module configured to receive and respond to input provided by a computing component;
 - an input filter module configured to receive input provided by the computing component for the application program module, filter the input, and pass the filtered input to the application program module, wherein the filter comprise one or more sets instructions that, when executed, filter the input and sets of instructions being automatically produced according to the method as recited in claim 1.

15 (Currently amended) A computer-readable storage medium comprising a set of instructions for filtering input, wherein the set of instructions has been automatically produced by the method as recited in claim 1.

16. (Currently amended) An input filter stored in a computer having computer executable instructions that, when executed, filter input, wherein said computer executable instructions were automatically produced by the method as recited in claim 1.

17. (Currently amended) A computer comprising one or more computer-readable storage medias having computer-executable instruction that, when executed by the computer, perform the method as recited in claim 1.

18. (Currently amended) A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 1.

19. (Currently amended) A method facilitating speedy and production of one or more sets of instructions for an input filter of a computer system, the method comprising:

obtaining input-description-data, which defined properties of valid input provided by a computing component without human intervention;

transforming the input-description-data into a data structure, wherein the data structure is an organized representation of the input-description-data and the data structure is embodied on a computer-readable storage media;

storing the data structure in a persistent form;

from the organized representation of the input-description-data of the data structure, automatically generating a set of instructions for filtering input directly provided by the computing component without human intervention based upon the properties of valid input defined by the input-description-data, wherein the properties of

valid input indicate parameters of input by defining boundary delimitations of parameters and define assumptions regarding parameters, the generating further comprises:

 parsing the data structure to extract the input-description-data organized in the data structure;

 synthesizing the set of instructions based upon the input-description-data extracted by the parsing, the synthesizing comprising translating the organized representation of the input-description-data of the data structure into the set of instructions.

21. (Currently amended) A method as recited in claim 19, wherein the data structure is in a hierarchical markup language.

26. (Currently amended) A method as recited in claim 19, wherein during obtaining, the input-description-data is obtained from a user via a graphical user interface.

27. (Currently amended) A computer-readable storage medium comprising a set of instructions for filtering input, wherein the set of instructions has been automatically produced by the method as recited in claim 19.

28. (Currently amended) An input filter stored in a computer having computer executable instructions that, when executed, filter input, wherein said

computer executable instructions were automatically produced by the method as recited in claim 19.

29. (Currently amended) A computer system comprising:

a memory comprising one or more program modules comprised of computer-executable instructions; and a processor coupled to the memory, the processor being configured to receive and response to input provided by a computing component;

an input filter module configured to receive input provided by a computing component for the application program module, filter the input, and pass the filtered input to the application program module, wherein the filter comprises one or more sets of instructions that, when executed , filter the input, and said sets instructions being automatically produced according to the method as recited in claim 19.

32. (Currently amended) A computer comprising one or more computer-readable storage media having computer-executable instructions that, when executed by the computer, perform the method as recited in claim 19.

33. (Currently amended) A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 19.

42. (Currently amended) An automatic filter-instructions production system comprising:

an user interface for obtaining input-description-data, which define properties of valid input provided by a computing component;

a transformer configured to transform the input-description-data into a data structure, wherein the data structure is an organized representation of the input-description-data and the data structure is embodied on a computer-readable storage media;

a memory, wherein the memory is configured to store the data structure;

a filter-instructions automatic generator ("autogen") configured to automatically generate from the organized representation of the input-description-data of the data structure a set of instructions for filtering input provided by the computing component based upon the properties of valid input defined by the input-description-data, wherein the filter-instructions autogen is further configured to acquire the properties from the data structure when automatically generating the set of instructions, wherein the properties of valid input indicate parameters of input by defining boundary delimitations of said parameters and define assumptions regarding parameters,

the autogen being further configured to:

parse the data structure to extract the input-description-data organized in the data structure;

synthesize the set of instructions based upon the input-description-data extracted by the parsing, wherein when synthesizing the autogen is configured to translate the

organized representation of the input-description-data of the data structure into the sets of instructions.

47. (Currently amended) A computer-readable storage medium comprising a set of instructions for filtering input, wherein the set of instructions has been automatically produced by the system as recited in claim 42.

48. (Currently amended) An input filter stored on a computer having computer executable instructions that, when executed, filter input, wherein said computer-executable instructions were automatically produced by the system as recited in claim 42.

50. (Currently amended) A system for facilitating the production of one or more sets of instructions, the system comprising:

a memory comprising a set of computer program instructions;

a processor coupled to the memory, the processor being configured to execute the computer program instructions, which comprise:

obtaining input-description-data, which define properties of valid input provided by a computing component;

transforming the input-description-data into a data structure, wherein the data structure is an organized representation of the input-descriptor-data and the data structure is embodied on a computer-readable storage media;

storing the data structure in a persistent form;
from the organized representation of the input-description-data of the data structure,
automatically generating a set of instruction for filtering input provided by the computing
component based upon the properties of valid input defined by the input-description-
data, wherein the generating acquires the properties for generating the set of
instructions from the data structure, wherein the properties of valid input indicate
parameters of input by defining boundary delimitations of parameters and define
assumptions regarding parameters, the generating further comprises:

parsing the data structure to extract the input-description-data organized in the
data structure;

synthesizing the set of instructions based upon the input-description-data
extracted by the parsing, the synthesizing comprising translating the organized
representation of the input-description-data of the data structure into the set of
instructions.

Allowable Subject Matter

3. Claims 1, 5-9, 11-19, 21, 24, 26-33, 42, 47-50 allowed.

Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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